

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

JSDQ MESH TECHNOLOGIES LLC,

Plaintiff,

v.

EERO LLC,

Defendant.

Case No.:

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff JSDQ Mesh Technologies LLC complains of Defendant eero LLC as follows:

NATURE OF LAWSUIT

1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.

THE PARTIES

2. JSDQ Mesh Technologies LLC (“JSDQ” or “Plaintiff”) is a Delaware limited liability company with its principal place of business at 401 Lake Avenue, Round Lake Beach, Illinois 60073.

3. JSDQ is the named assignee of, owns all right, title and interest in, and has standing to sue for infringement of United States Patent No. 7,286,828, entitled “Method of Call Routing and Connection,” which issued on October 23, 2007 (the “‘828 Patent”) (a true and correct copy is attached as Exhibit A); United States Patent No. 7,916,648, entitled “Method of Call Routing and Connection”, which issued on March 29, 2011 (the “‘648 Patent”) (a true and correct copy is attached as Exhibit B); United States Reissue Patent No. RE43,675, entitled “Wireless Radio Routing System,” which issued on September 18, 2012 (the “‘675 Patent”) (a true and correct copy is attached as Exhibit C); and United States Reissue Patent No. RE44,607, entitled “Wireless Mesh

Routing Method,” which issued on November 19, 2013 (the “‘607 Patent”) (a true and correct copy is attached as Exhibit D) (collectively, the “Patents-in-Suit”).

4. eero LLC (“eero” or “Defendant”) is a Delaware limited liability company with a listed registered agent of Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808. The Delaware Department of State identifies the formation date of eero as April 3, 2014. (Exhibit E).

5. Upon information and belief, eero was acquired by Amazon on or about February 11, 2019. (Exhibit F).

6. The claims of patent infringement asserted in this Complaint are limited to the time frame of August 6, 2014 (six years prior to the filing of this action) through February 11, 2019 (the date of Amazon’s acquisition of eero).

7. During the relevant time period, eero advertised wireless self-healing mesh products and services at least through its website located at <https://eero.com/shop>.

8. During the relevant time period, eero provided wireless self-healing mesh networking products and services, including the eero family of wireless mesh products, throughout the United States and this Judicial District.

JURISDICTION AND VENUE

9. This Court has exclusive jurisdiction over the subject matter of this Complaint under 28 U.S.C. §§ 1331 and 1338(a).

10. Personal jurisdiction over Defendant is proper in this Court because eero is a Delaware limited liability company, has minimum contacts with the State of Delaware, and has purposefully availed itself of the privileges of conducting business in the State of Delaware.

11. Venue in this Judicial District is proper under 28 U.S.C. § 1400(b) because eero resides in this Judicial District.

BRIEF HISTORY OF JSDQ AND ATTEMPTS TO ENGAGE EERO

12. JSDQ is wholly owned by inventor, Mr. Jerry Schloemer, and patent attorney, Mr. David Quinlan. Mr. Schloemer is a prolific inventor of mesh related technologies as a 35-year industry veteran. Nearly a decade before a working group would even form at IEEE, necessary solutions to the challenges of optimized mesh networks were disclosed in the JSDQ Patent Portfolio.

13. JSDQ has invested a great deal of time and money to develop and legally protect its intellectual property.

14. JSDQ attempted to engage eero in amicable discussions regarding the JSDQ Patent Portfolio outside of litigation by sending an initial letter via email on May 12, 2020 and exchanging several follow up emails through July 13, 2020. Despite JSDQ's attempt to engage in discussions with eero, even after providing eero with evidence of use information, eero stopped communicating with JSDQ after June 2020 without ever identifying any basis for non-infringement. Accordingly, JSDQ's only remaining recourse was through the filing of this Complaint.

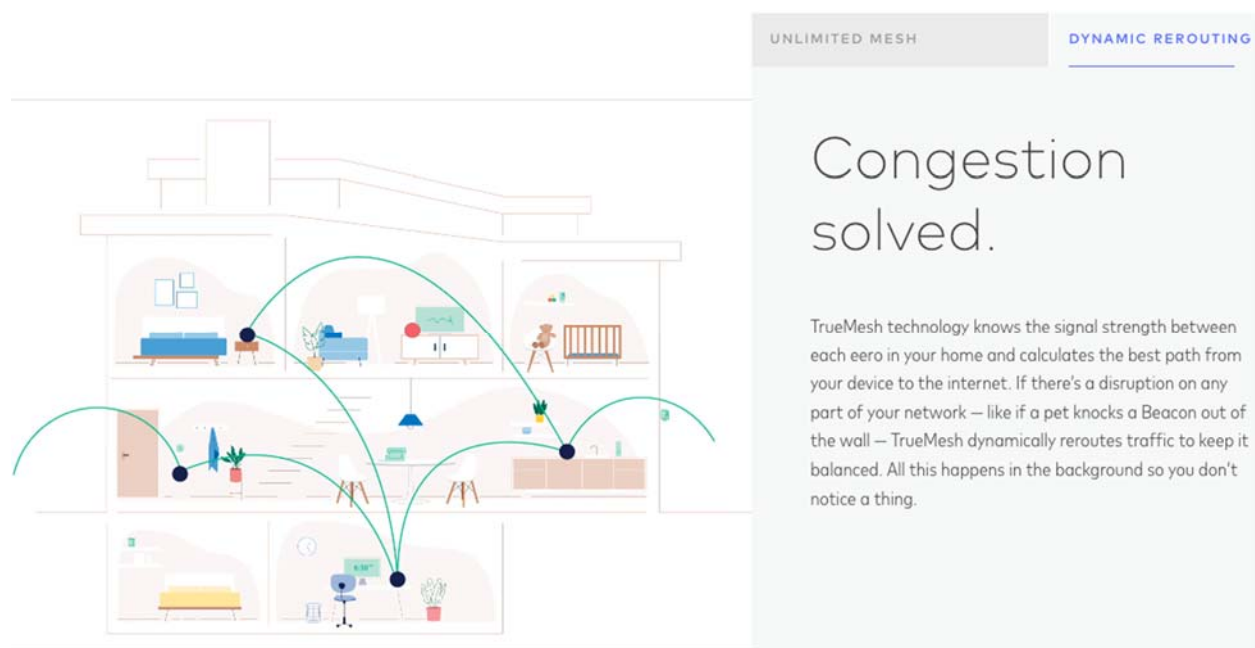
THE ACCUSED WIRELESS ROUTING SYSTEMS

15. During the relevant time frame, eero infringed certain method claims of the Patents-in-Suit through the use (in conjunction with the manufacture, sale, offer for sale, advertisement, importation, shipment, distribution, service, installation and/or maintenance) of eero's wireless mesh WiFi networking products, services and solutions – including hardware, software, and firmware components (*e.g.*, eero, eero Pro, and eero Beacon routers, antennas and antenna technologies, eero app for iOS and/or Android, TrueMesh routing protocol, cloud servers, etc.), associated therewith (herein referred to as the “Accused Wireless Routing Systems”).

16. Specifically, eero infringed the below-identified method claims of the Patents-in-Suit prior to Amazon's acquisition of eero in February 2019. (See Exhibit F, <https://press.aboutamazon.com/news-releases/news-release-details/amazon-acquire-eero-help-customers-better-connect-smart-home>).

17. Upon information and belief, eero's Accused Wireless Routing Systems included at least the following known nodes: eero (1st and 2nd generation), eero Pro and eero Beacon ("eero branded nodes") (see Exhibit G for eero datasheets and information on these products).

18. According to eero: "TrueMesh technology knows the signal strength between each eero in your home and calculates the best path from your device to the internet. If there's a disruption on any part of your network – like if a pet knocks a Beacon out of the wall – TrueMesh dynamically reroutes traffic to keep it balanced. All this happens in the background so you don't notice a thing." (See <https://eero.com/technology>). The below TrueMesh schematics (and when source links are clicked, moving simulations) illustrate multi-hop radio links using radio parameter measurements for dynamic rerouting through the eero mesh networks:



(See <https://eero.com/technology>).

UNLIMITED MESH

DYNAMIC REROUTING

Mad hops, mad power.

With TrueMesh, WiFi hops between eero devices to travel down hallways or go around walls. Most other WiFi systems only allow for one hop in any direction — so something as simple as a wall can mean that your devices can't get the WiFi they need. eero allows for more hops with less speed degradation — so you can cover any home and navigate around any obstacle.

(See <https://eero.com/technology>).

19. eero's TrueMesh dynamic rerouting protocol used radio links that can include at least one link with a directional signal using MIMO beamforming antenna technology.

			
	eero	eero Pro	eero Beacon
Description	Fast, reliable WiFi. eero is the little router with a huge wireless footprint.	Powerful tri-band WiFi. eero Pro gives you the speed you need.	A flexible WiFi boost. eero Beacon pops into a wall outlet and expands your WiFi coverage, just like that.
WiFi connectivity	Dual-band Wi-Fi radios, simultaneous 2.4 GHz and 5 GHz 2x2 MU-MIMO, beamforming, IEEE802.11a/b/g/n/ac	Tri-band WiFi radios, simultaneous 2.4GHz, 5.2GHz, and 5.8GHz 2x2 MU-MIMO, beamforming, IEEE 802.11a/b/g/n/ac	Dual-band Wi-Fi radios, simultaneous 2.4 GHz and 5 GHz 2x2 MU-MIMO, beamforming, IEEE802.11a/b/g/n/ac

(See <https://eero.com/technology>).

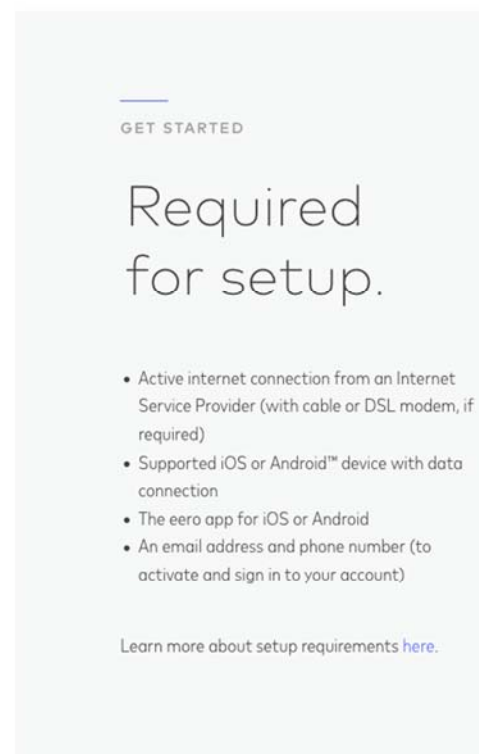
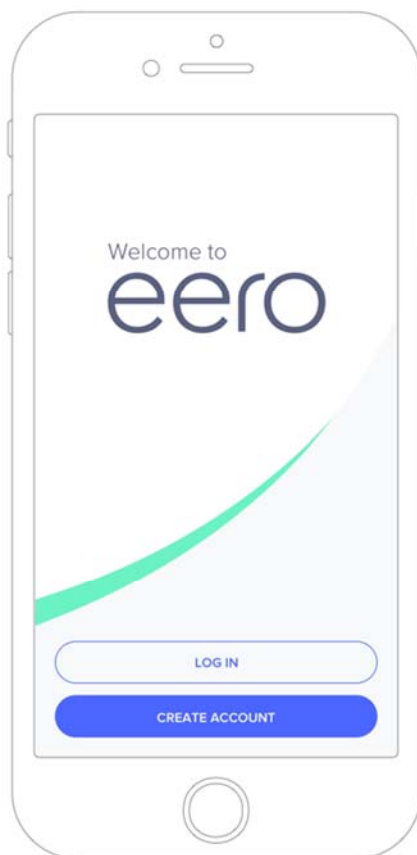
20. eero provided all installation requirements for the customers as a plug and play solution. All eero customers were required to download the eero app on to an iOS and/or Android device to set up and continue to operate the Accused Wireless Routing Systems:

GETTING STARTED

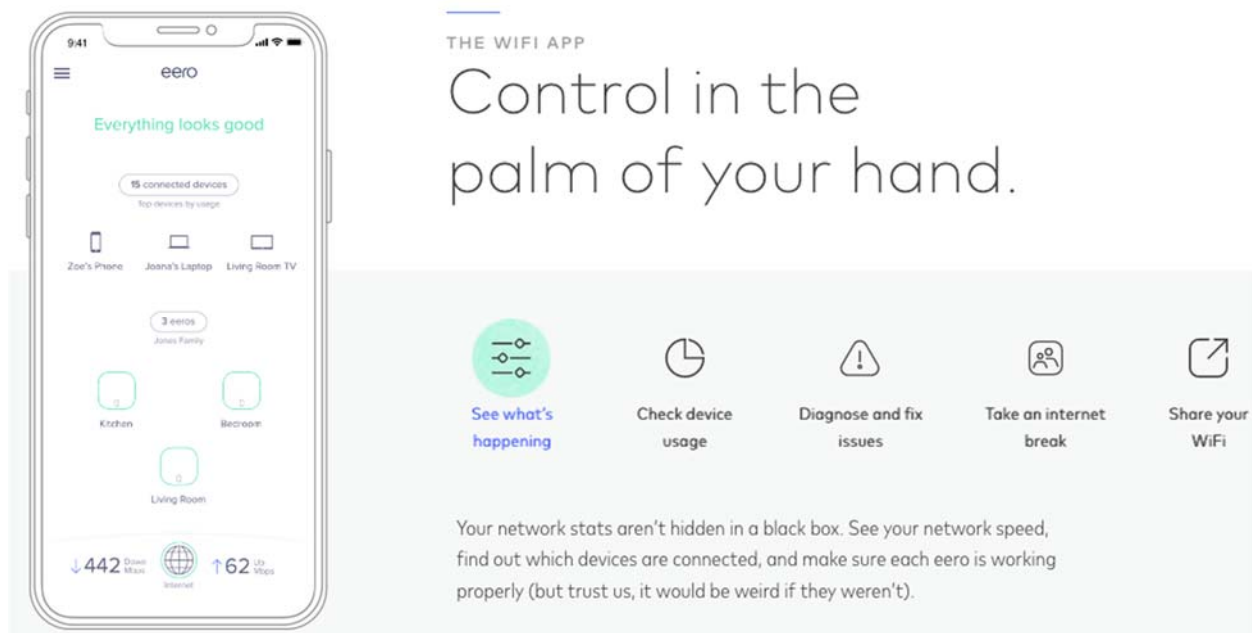
Plug and play.

Whether you're comfortable with technology or not, you can set up amazingly fast WiFi with eero in under 10 minutes. Start by plugging an eero or eero Pro directly into your modem.

(See <https://eero.com/experience>).

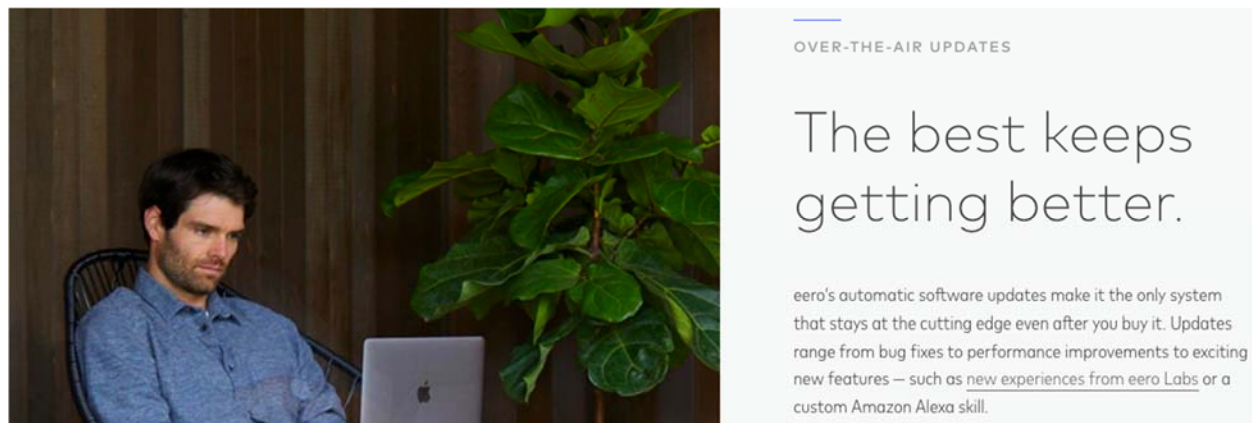


(See <https://eero.com/app>).



(See <https://eero.com/experience>).

21. eero automatically provided all ongoing software and firmware updates to the eero branded nodes of the Accused Wireless Routing System.



(See <https://eero.com/technology>).

Will my 1st-generation eero continue to be supported?

Absolutely!

We will continue to support our 1st-generation hardware with our ongoing software updates and customer support. And every eero comes with a one-year warranty, so should you have any issues, we will continue to honor any warranty within that period.

We also designed our eero Pro and eero hardware to be backward compatible. This means you can add an eero, eero Pro, or eero Beacon to your existing eero network.

(See <https://support.eero.com/hc/en-us/articles/115002932406-Will-my-1st-generation-eero-continue-to-be-supported->).

22. The Accused Wireless Routing Systems subject to this Complaint necessarily include all substantively similar products and any predecessor and/or successor versions of the foregoing (during the relevant time period).

23. After adequate discovery, JSDQ may seek leave to amend this Complaint to include additional details of infringement, if any, by other products hereafter discovered to infringe the Patents-in-Suit.

INFRINGEMENT BY DEFENDANT EERO

INFRINGEMENT OF UNITED STATES PATENT NO. 7,286,828

24. JSDQ realleges and incorporates by reference paragraphs 1 through 23, inclusive, as though fully set forth herein.

25. eero directly infringed at least independent method claims 47, 56 and 68 of the '828 Patent (prior to its expiration on or about February 27, 2015).

Claim 47

26. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided a radio communication route among a plurality of individual nodes capable of distribution arbitrarily relative to each other, said nodes being controllable independent of a central computer separate from said nodes, in accordance with the limitations of claim 47 of the '828 Patent.

27. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 47 of the '828 Patent by:

- (a) establishing radio links between pairs of said nodes using radio signals transmitted from each said node and received by other said nodes without regard to the relative locations of said nodes of said pair, wherein at least some of said radio signals include associated routing messages including an actual radio parameter of said radio signals;
- (b) storing said routing messages received by each said node;
- (c) selecting a said routing message associated with a preferred said radio link using said actual radio parameter of said received radio signals;
- (d) deleting at least some of said other stored routing messages;
- (e) modifying said selected routing message;
- (f) retransmitting said modified routing message; and
- (g) assembling said preferred radio links into a radio communication route between an originating node and a destination node, said route including plural said radio links.

28. Upon information and belief, eero likely infringed at least dependent method claims 48, 49 and 52 of the '828 Patent (prior to its expiration on or about February 27, 2015).

Claim 56

29. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided a radio communication route among a plurality of individual nodes capable of distribution arbitrarily relative to each other, said nodes being controllable independent of a central computer separate from said nodes, in accordance with the limitations of claim 56 of the '828 Patent.

30. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 56 of the '828 Patent by:

- (a) establishing radio links between pairs of said nodes using radio signals transmitted from each said node and received by other said nodes without regard to the relative locations of said nodes of said pair, at least some of said radio signals including routing messages;
- (b) storing said routing messages received by each said node;
- (c) selecting a said routing message associated with a preferred said radio link using a parameter of said routing messages in said received radio signals;
- (d) modifying said selected routing message;
- (e) deleting at least some of said other stored routing messages;
- (f) retransmitting said modified routing message;
- (g) assembling said preferred radio links into an optimum radio communication route between an originating node and a destination node, said route including plural said radio links; and
- (h) changing said route between said originating node and said destination node only when a condition of the route changes.

31. Upon information and belief, eero likely infringed at least dependent method claims 57 and 59 of the '828 Patent (prior to its expiration on or about February 27, 2015).

Claim 68

32. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided a wireless communication route having a plurality of individual routing nodes distributed to form a mesh of said routing nodes throughout an area covered by a wireless communication system, in accordance with the limitations of claim 68 of the '828 Patent.

33. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 68 of the '828 Patent by:

- (a) establishing wireless links between pairs of said routing nodes using wireless signals transmitted from each said routing node and received by other said routing nodes without regard to the relative locations of said routing nodes of said pair, at least some of said wireless signals including routing messages;
- (b) storing said routing messages received by each said node;
- (c) selecting a said routing message associated with a preferred said wireless link using a parameter of said received wireless signals;
- (d) modifying said selected routing message;
- (e) deleting at least some of said other stored routing messages;
- (f) retransmitting said modified routing messages; and
- (g) assembling said preferred wireless links into an optimum wireless communication route between a remote routing node and a destination routing node, said route including plural said wireless links.

34. Upon information and belief, eero likely infringed at least dependent method claims 69 and 70 of the '828 Patent (prior to its expiration on or about February 27, 2015).

35. After adequate discovery, JSDQ reserves the right to assert allegations of infringement of additional method claims of the '828 Patent.

36. To the extent required by law, JSDQ has complied with the provisions of 35 U.S.C. § 287.

37. Aero's direct infringement as described above injured JSDQ and JSDQ is entitled to recover damages adequate to compensate it for such infringement, but in no event less than a reasonable royalty from August 6, 2014 to February 27, 2015.

INFRINGEMENT OF UNITED STATES PATENT NO. 7,916,648

38. JSDQ realleges and incorporates by reference paragraphs 1 through 23, inclusive, as though fully set forth herein.

39. Aero directly infringed at least independent method claims 29 and 36 of the '648 Patent (prior to its expiration on or about February 27, 2015).

Claim 29

40. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided a radio communication route among individual nodes capable of distribution arbitrarily relative to each other, in accordance with the limitations of claim 29 of the '648 Patent.

41. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 29 of the '648 Patent by:

- (a) establishing radio links between pairs of said nodes using radio signals transmitted from one said node and received directly by other said nodes without regard to the relative locations of said nodes of said pair transmitting and receiving said signals;
- (b) measuring values of a radio parameter of radio signals received by a said node;

- (c) transmitting from at least two of said nodes radio signals with associated routing messages, wherein said routing message from each of said two nodes identifies a multilink route segment to another said node and includes a value of a radio parameter related to a condition of said route segment;
- (d) selecting at a said node receiving said radio signals a preferred said multi-link route segment, wherein said selection is based on the measured values of said radio parameter of said received radio signals and the values of said radio parameter included with said routing messages in said received radio signals;
- (e) transmitting from said selecting node a radio signal with a routing message identifying said selecting node and said preferred route segment; and
- (f) assembling a radio communication route between an originating node and a destination node, said route being assembled by computers in a plurality of said nodes independently of any computer separate from said nodes in said route, and said route including at least one said preferred multi-link route segment.

Claim 36

42. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems created a radio communications route comprising multiple radio links between a plurality of pairs of nodes capable of distribution arbitrarily relative to each other, in accordance with the limitations of claim 36 of the '648 Patent.

43. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 36 of the '648 Patent by:

- (a) receiving at a said node at least two radio signals including routing messages transmitted from other said nodes, said signals being received at said node directly from said nodes transmitting said signals without regard to the relative locations of

said node receiving said signals and said nodes transmitting said signals, wherein said routing message from each said node has content (i) identifying at least one preferred multi-link route segment to another said node, (ii) including the number of said radio links in said route segment, and (iii) including at least one value of a radio parameter of radio signals associated with said radio links in said route segment;

- (b) measuring at said receiving node values of said radio parameter associated with at least some of said radio signals received by said receiving node;
- (c) storing at said receiving node said measured values of said radio parameter and said routing messages associated with said measured values;
- (d) selecting at a said node receiving said routing messages a preferred said route segment, wherein said selection is based on the measured values of said radio parameter of said received radio signals and the stored values of said radio parameter;
- (e) transmitting from said selecting node a routing message identifying said preferred route segment; and
- (f) assembling a radio communication route between an originating node and a destination node.

44. Upon information and belief, eero likely infringed at least dependent method claims 37, 38 and 40 of the '648 Patent (prior to its expiration on or about February 27, 2015).

45. After adequate discovery, JSDQ reserves the right to assert allegations of infringement of additional method claims of the '648 Patent.

46. To the extent required by law, JSDQ has complied with the provisions of 35 U.S.C. § 287.

47. eero's direct infringement as described above injured JSDQ and JSDQ is entitled to recover damages adequate to compensate it for such infringement, but in no event less than a reasonable royalty from August 6, 2014 to February 27, 2015.

INFRINGEMENT OF UNITED STATES REISSUE PATENT NO. RE 43,675

48. JSDQ realleges and incorporates by reference paragraphs 1 through 23, inclusive, as though fully set forth herein.

49. eero directly infringed independent method claim 15 of the '675 Patent (prior to Amazon's acquisition of eero in or around February 2019).

Claim 15

50. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided a radio communication route among individual nodes capable of distribution arbitrarily relative to each other, in accordance with the limitations of claim 15 of the '675 Patent.

51. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 15 of the '675 Patent by:

- (a) establishing radio links between respective pairs of said nodes, at least one said node using a directional radio signal transmitted from said node and received directly by another said node without regard to the relative locations of said nodes;
- (b) measuring a value of a radio parameter of a said directional radio signal received by at least one said node;
- (c) transmitting from said at least one node a radio signal with an associated routing message based on at least one measured value of the radio parameter; and

- (d) assembling a radio communication route between an originating node and a destination node, said route being assembled by computers in a plurality of said nodes using routing messages received by said nodes, wherein said computers in said nodes assemble said route independently of any computer separate from said nodes in said route, and said route includes at least one route segment with a said node transmitting a directional radio signal.

52. Upon information and belief, eero likely infringed at least dependent method claims 17, 18, 19, 20 and 22 of the ‘675 Patent (prior to its Amazon’s acquisition of eero in or around February 2019).

53. After adequate discovery, JSDQ reserves the right to assert allegations of infringement of additional method claims of the ‘675 Patent.

54. To the extent required by law, JSDQ has complied with the provisions of 35 U.S.C. § 287.

55. eero’s infringement as described above has injured JSDQ and JSDQ is entitled to recover damages adequate to compensate it for such infringement, but in no event less than a reasonable royalty from August 6, 2014 until Amazon’s acquisition of eero in or around February 2019.

INFRINGEMENT OF UNITED STATES REISSUE PATENT NO. RE 44,607

56. JSDQ realleges and incorporates by reference paragraphs 1 through 23, inclusive, as though fully set forth herein.

57. eero directly infringed at least independent method claims 3 and 11 of the ‘607 Patent (prior to its Amazon’s acquisition of eero in or around February 2019).

Claim 3

58. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided at least two radio communication routes among individual nodes capable of distribution arbitrarily relative to each other, in accordance with the limitations of claim 3 of the '607 Patent.

59. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 3 of the '607 Patent by:

- (a) establishing radio links between respective pairs of said nodes using radio signals transmitted from said nodes and received by other said nodes, wherein at least some of said radio signals include routing messages;
- (b) using a directional radio signal transmitted from one said node in a directional link and received directly by the other said node in said directional link;
- (c) measuring a parameter of radio signals received by at least some of said nodes;
- (d) transmitting from at least some of said nodes radio signals with associated routing messages based on said measured parameter; and
- (e) assembling radio communication routes between at least two originating nodes and at least one destination node, wherein computers in a plurality of said nodes use routing messages received by said nodes to assemble said routes independently of any computer separate from said nodes in said routes and without regard to the relative locations of said nodes in a said route, both said routes including at least one said directional link.

60. Upon information and belief, eero likely infringed at least dependent method claims 5, 6 and 7 of the '607 Patent (prior to its Amazon's acquisition of eero in or around February 2019).

Claim 11

61. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems provided at least two radio communication routes among individual nodes capable of distribution arbitrarily relative to each other, in accordance with the limitations of claim 11 of the '607 Patent.

62. As shown in the supporting Exhibits to this Complaint, the Accused Wireless Routing Systems performed each of the limitations of claim 11 of the '607 Patent by:

- (a) establishing radio links between respective pairs of said nodes using radio signals transmitted from said nodes and received by other said nodes, wherein at least some of said radio signals include routing messages;
- (b) using a directional radio signal transmitted from at least one said node in a directional link and received directly by the other said node in said directional link; and
- (c) assembling radio communication routes between at least two originating nodes and at least one destination node, said routes being assembled by computers in a plurality of said nodes using routing messages received by said nodes, wherein said computers in said nodes assemble said routes independently of any computer separate from said nodes in said routes without regard to the relative locations of said nodes in a said route said originating nodes simultaneously receive communication signals from different originating remotes, and both said routes include at least one said directional link.

63. Upon information and belief, eero likely infringed at least dependent method claim 16 of the '607 Patent (prior to its Amazon's acquisition of eero in or around February 2019).

64. After adequate discovery, JSDQ reserves the right to assert allegations of infringement of additional method claims of the '607 Patent.

65. To the extent required by law, JSDQ has complied with the provisions of 35 U.S.C. § 287.

66. eero's infringement as described above has injured JSDQ and JSDQ is entitled to recover damages adequate to compensate it for such infringement, but in no event less than a reasonable royalty from August 6, 2014 until Amazon's acquisition of eero in or around February 2019.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff JSDQ Mesh Technologies LLC respectfully requests this Court to enter judgment against Defendant eero LLC – and against each of its subsidiaries, successors, parents, affiliates, officers, directors, agents, servants, employees, and all persons in active concert or participation with it – granting the following relief:

- A. The entry of judgment in favor of Plaintiff and against Defendant;
- B. An award of damages against Defendant adequate to compensate Plaintiff for the infringement that occurred from August 6, 2014 (six years prior to the filing of this action pursuant to 35 U.S.C. § 286) through the respective expirations of the Patents-in-Suit and/or acquisition by Amazon (whichever is earlier), but in no event less than a reasonable royalty as permitted by 35 U.S.C. § 284, together with prejudgment interest from the date the infringement began; and
- C. Such other relief to which Plaintiff is entitled under the law and any other and further relief that this Court or a jury may deem just and proper.

JURY DEMAND

Plaintiff demands a trial on all issues presented in this Complaint.

Dated: August 6, 2020

Of Counsel:

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Respectfully submitted,

/s/ George Pazuniak

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